UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF TEXAS
WACO DIVISION

	)	
PROXENSE, LLC	)	
	)	Civil Action No. 6:20-cv-879
Plaintiff,	)	
	)	
v.	)	
	)	
TARGET CORPORATION	)	
	)	
Defendant.	)	**JURY TRIAL DEMANDED**
	)	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff, Proxense, LLC brings this action for patent infringement against Target

Corporation (hereafter "Target" or "Defendant"), and hereby alleges as follows:

THE PARTIES

1.   2.   Plaintiff Proxense, LLC is a Delaware company with its principal place of

business at 689 NW Stonepine Drive, Bend, Oregon 97703.

2.   Upon information and belief, Target is a corporation duly organized and existing

under the laws of the State of Minnesota and having its principal place of business at 1000

Nicollet Mall, Minneapolis, Minnesota, 55403. For purposes of diversity, Target is a citizen of

the State of Minnesota.

JURISDICTION

4.   This is a civil action for patent infringement under the patent laws of the United

States, 35 U.S.C. § 271, *et seq.* This Court has subject matter jurisdiction under 28 U.S.C. §§

1331 and 1338(a).

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5.   This Court has general personal jurisdiction over Target because Target is engaged in substantial and not isolated activity at its regular and established places of business within this judicial district.

6.   Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b)-(c) and 1400(b) because Target maintains a regular and established place of business, and has committed acts of patent infringement, within this judicial district.

FACTUAL BACKGROUND

7.   Proxense was founded in 2001 as a limited venture with a focus on designing core technology. The company was formally incorporated in 2005 as an LLC. Since that time Proxense developed sophisticated, proprietary, proximity-based detection, authentication, and automation technology, built on the concept of utilizing small electronic sensors (RDCs) capable of wirelessly detecting, authenticating, and communicating with personal digital devices (PDKs). From 2005-2012, Proxense developed core technology and commercial products, employing over thirty engineers and investing many millions of dollars in product development and other research and development efforts. One of the technology's foundational capabilities was to enable PDKs to run for as long as two years on tiny batteries. Significant financial and engineering resources were deployed to make this possible. The resulting developments became primary differentiators of Proxense's product line, and significant elements on which its business was built.

8.   Simultaneous to the core technology development, Proxense also designed and implemented various services/applications utilizing the technology's superb power efficiencies, and advanced wireless detection, authentication and secure communications functionalities. One such application was a wireless system designed to enhance and grow user / location interaction,

via secure, automated, advertising services, in retail, medical, and other such environments. Throughout this process, the company actively prosecuted patents on both its advanced technology, and related services/applications.

9.   Proxense also holds over 55 patents on related technology, including digital content distribution, digital rights management, personal authentication, biometric data management and mobile payments. Proxense continues to prosecute new patents on its proprietary technology.

THE PATENT-IN-SUIT

15.   On October 22, 2019, the PTO issued United States Patent No. 10,455,533 ("the '533 patent"), titled WIRELESS NETWORK SYNCHRONIZATION OF CELLS AND CLIENT DEVICES ON A NETWORK. The '533 patent is presumed valid and enforceable. See 35 U.S.C. § 282. A copy of the '533 patent is attached as Exhibit A.

16.   Proxense is the owner and assignee of all rights, title and interest in and to the '533 patent, and holds all substantial rights therein, including the rights to grant licenses, to exclude others, and to enforce and recover past damages for infringement of that patent.

17.   The '533 patent discloses important aspects of the Proxense technology, which is directed to, among other environments and applications, the use of a reader decoder circuit ("RDC"), or multiple RDCs, to interact with a personal digital key ("PDK") carried by a user of the system. A PDK "is a portable wireless device that may be conveniently carried by an individual to facilitate wireless tracking and/or allow the individual to wirelessly access various applications, assets, and/or services." The user's PDK may be any wireless device that may be worn or carried by a user, including a cellular phone. See '533 patent; col. 6, lns. 30-47. Upon information and belief, Target supplies or supplied an application which it directed users to

download and enable on their PDKs to facilitate reception and processing of signals received

from RDCs located within its retail premises.

18.   The RDC emits a wireless signal, or "beacon," that is used to identify and initiate

contact with PDKs that come into the wireless coverage boundary of the RDC. "When an

individual carrying the PDK 14 comes into proximity of the RDC 12 by entering a coverage

area of the RDC 12, a wireless communications session is initiated between the PDK 14 and the

RDC 12." Id. at col. 7, lns. 23-27. An example of a user's PDK entering the coverage area of a

single RDC 12 and establishing a wireless link with the RDC is shown in Figure 1 of the '533

patent, and is reproduced below.
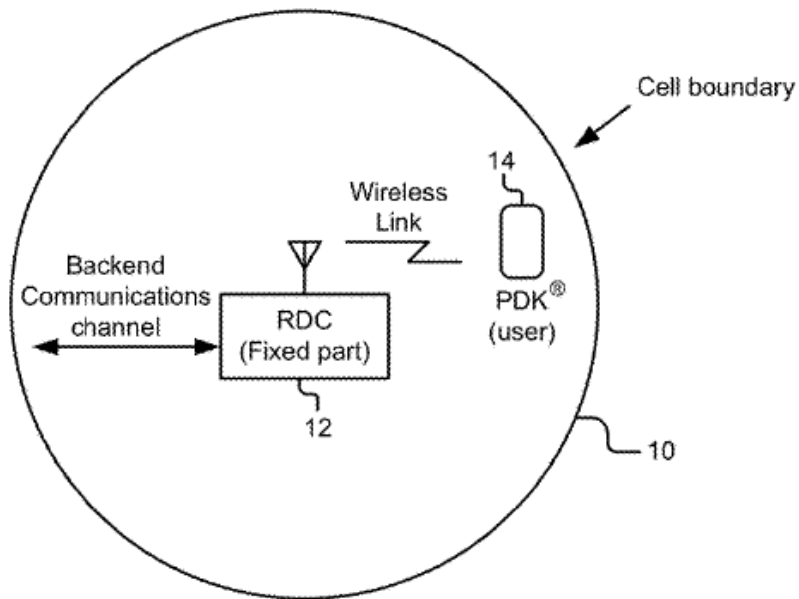
19.   The Proxense patented technology may also be used with multiple RDC beacon

units providing overlapping coverage areas to track individual user PDKs, as shown below in

Figure 3 of the '533 patent.
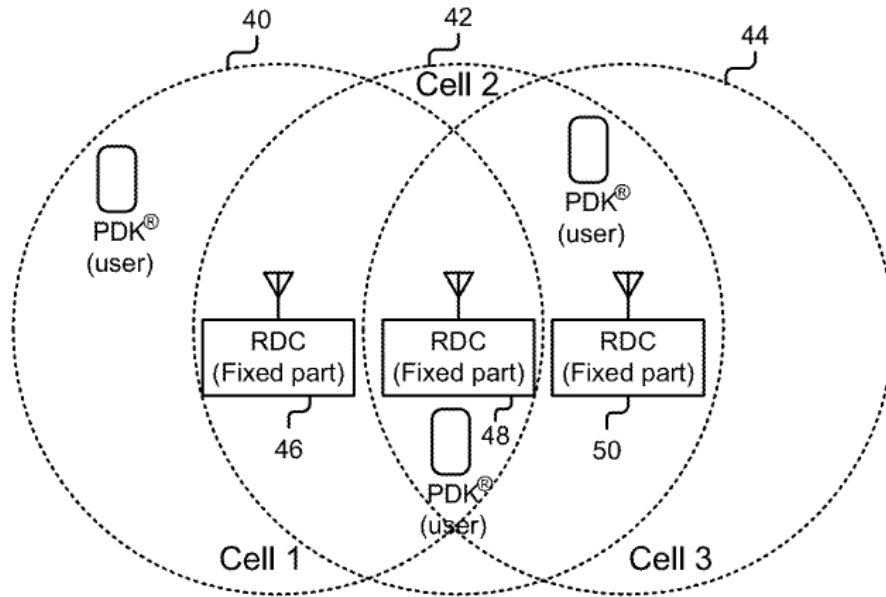
20.   In the retail environment, the Proxense patented technology enables in-store beacons to identify and track customers in the store by communicating with an application on the customer's cellular phone, and also provide information to the customer such as a store map, coupons and store-specific promotions.

21.   PDKs are normally in a battery save mode, or sleep mode, and periodically wake up, or transition to active mode, to look for RDCs. More specifically, PDKs employ a wakeup timer set to periodically prompt the PDK to wake up its receiver, tune it to a particular channel, and monitor the channel for an RDC beacon. See '533 patent; col. 26, ln. 65 – col. 27, ln. 7. If no beacon is detected within a given time period, the channel number is incremented (i.e., the PDK selects the next channel to monitor), the PDK resets its wakeup timer, and returns to sleep mode. Id. at col. 27, lns. 8-13. The above process then repeats when the wakeup timer once again expires, and prompts the PDK to wake up and monitor the next channel. Conversely, if a beacon is detected, the PDK retrieves the network ID of the RDC, and attempts to establish a

communications link with the RDC. Id. at col. 27, lns. 13-15. This process is illustrated in FIG. 26, below.
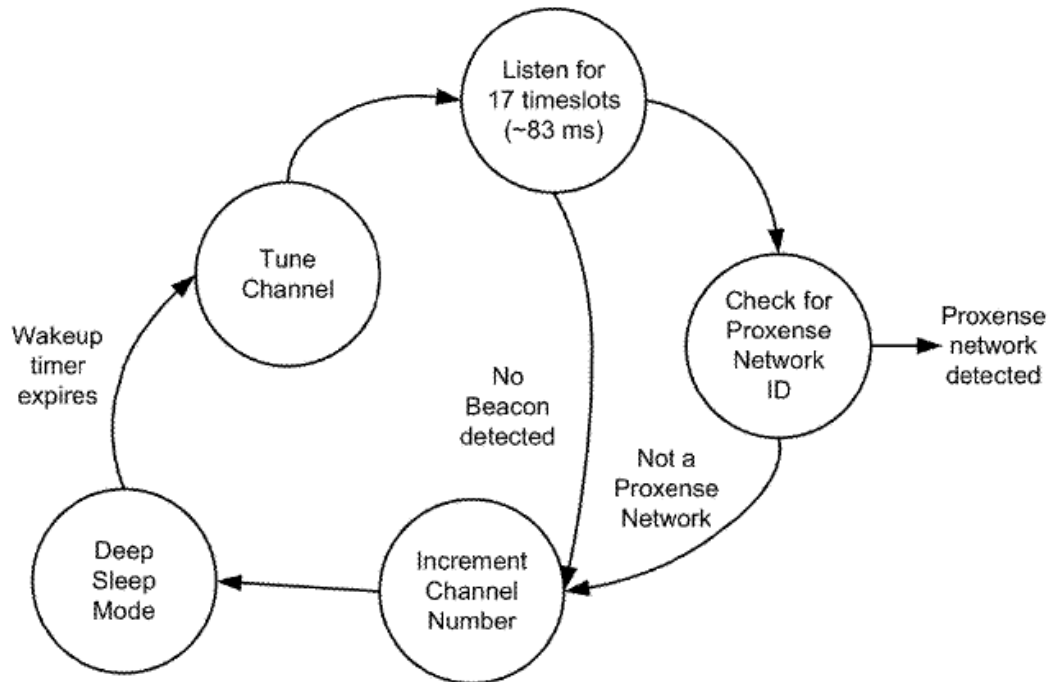
22.   Once linked, the PDK and RDC may transmit information to each other, as well as communicate with a central server. As a nonlimiting example, the PDK may transmit its ID to the RDC, which then may forward this information to a server for logging. See FIG. 34.

TARGET'S USE OF PROXENSE PATENTED TECHNOLOGY

23.   Target has more than 1,800 stores in the United States operating under the Target brand name. Target is a prolific user of Proxense's patented technology in all of its Target stores, including Target stores within the Middle District of Florida. In the third quarter of 2019, Target reported $18.7 billion dollars in revenue, an increase of 4.7% from third quarter of 2018. Target also reported operating income of more than $1 billion dollars, an increase of 22.3% from third quarter of 2018.

24.   Target is the developer of the Target mobile phone application (a/k/a the Target "App") and makes it available for download, including via the App Store for iOS devices and the Google Play Store for Android devices. The App Store for iOS devices lists Target as the developer and seller of the Target App, and also indicates the copyright as "2019 Target Corporation." The Google Play store lists Target as the developer contact for the Target App and also indicates that the Target App is "offered by" Target Corporation.

25.   The Target App is a key part of Target's marketing and sales efforts. The Target App has been downloaded more than ten million times from the Google Play store and is listed in the top 20 shopping applications on the App store for iOS devices. Target heavily promotes the features of the Target App that integrate with its physical stores.

26.   The Target App, by design, interacts with Target Bluetooth beacons in Target's stores in order to determine a consumer's in-store location. In 2015, Target began replacing the light fixtures in its stores with light-emitting diode (LED) fixtures (also known as luminaires) provided by Acuity Brands. These new light fixtures include not only LED lights, but also Bluetooth beacons (i.e., Target Bluetooth beacons) that are powered by the fixture. Target configures the Target Bluetooth beacons and controls their operation.

27.   As early as September 2017, Target announced its plans to upgrade its Target App to provide indoor proximity functionality for the consumer:

> A few weeks ago, we shared some exciting news about Target's popular Cartwheel savings program becoming part of the Target mobile app. It's another example of Target blending digital with physical stores to make shopping easier, more convenient and more fun.
> *Now, Target is further upping its app game with beacon and Bluetooth technology that shows your location on the app's map as you move*

> ***throughout the store. The technology — think of it as GPS for your***
> ***shopping cart — will be live in about half of Target's stores in time for***
> ***the holidays. And as guests use the in-store location technology to shop,***
> ***the app will also display nearby Cartwheel deals.***
>
> "Now you'll never have to miss out on an opportunity to save," says
> Target's chief information and digital officer Mike McNamara. "This
> promises to make it easier than ever to find what you're looking for, so
> you can fill up your cart and get on your way."

(https://corporate.target.com/article/2017/09/target-app-mike-mcnamara) (emphasis added).

28.   Currently, all (or substantially all) Target stores, including those located in Florida and in this judicial district, are equipped with Target Bluetooth beacons that cover essentially all the areas in which consumers shop.

29.   Target began testing its Target Circle loyalty program in 2017 at a limited number of stores, including Target stores in Dallas-Fort Worth, and later, Charlotte, Denver, Indianapolis, Kansas City, and Phoenix.

30.   In October 2019, Target launched its Target Circle loyalty program nationwide as a rebranded version of Cartwheel. Target, consistent with its September 2017 announcement, used the Target App to offer nearby Target Circle offers to consumers at its stores.

31.   On Target's November 20, 2019 third quarter earnings conference call, Target reported that:

> And of course, the fourth quarter will benefit from Target Circle, our new loyalty program
> that launched nationwide last month. Even though the program is brand new, Target Circle
> already has more than 35 million members, making it America's fastest growing loyalty

program. During an 18-month test period, guests enrolled in Target Circle save more, shop

more frequently and spend 2% to 5% more than guests who weren't in the program.

(Target Corp Q3 2019 Earnings Call (Nov. 20, 2019), prepared remarks of Brian Cornwell, Board

Chairman and CEO).

32.   Target has heavily promoted the nationwide launch of Target Circle. Target, in

fact, specifically reported increased marketing expenses due to the October 2019 launch of

Target Circle on its 3Q 2019 earnings call.

33.   Target instructs and encourages its consumers to install the Target App on their

mobile devices and rewards them for installing the Target App by, among other things, providing

in-store services and information.

34.   Target conditions consumers' receipt of benefits that are available via the Target

App on consumers' downloading, installing, and using the Target App and associated software

on their devices (e.g., phone or tablets). For example, consumers must download and install the

Target App in order to receive map-based information about the in-store location of products

offered by Target. As another example, consumers must download and install the Target App in

order to receive information regarding certain special offers (e.g., Target Circle offers) via the

Target App. Exemplary features of the Target App are described further below.

35.   Target also establishes the manner or timing of consumers' use of the Target App.

For instance, Target configures the Target App with menu structures and buttons that establish

how and when a consumer uses the Target App. As one example, a "Cartwheel Offers Near

You" (now "Target Circle Near You") feature becomes available to the consumer via the Target

App when the consumer is detected as being at a Target store.

36.   As another example, for checkout and payment features of the Target App, Target establishes the manner and timing of the consumer's use of those features. The consumer must log into the Target App in order to use the "Wallet" feature, in which Target Circle Offers may be used when the consumer purchases a product, and in-store payment features are available. The Target App Wallet feature allows the consumer to display a bar code that is scanned by a Target employee for in-store check-out. The consumer must associate a RedCard account or other payment method with the barcode in order to pay via the barcode at the Target store during checkout. Target establishes the manner and timing in which these features may be used, for example, when during in-store check-out that barcode scanning is available.

37.   Target also conditions the benefit of using Target Circle Offers via the Target App to conveniently obtain discounts or promotions on the consumer's use of the Target App checkout feature, including, for in-store checkout, displaying the barcode via the Target App. The consumer must use the Target App features in the way designed by Target in order to pay via the Target App. The consumer may not leave the Target store with goods unless the consumer purchases the goods, and the consumer must use one of the processes that Target provides for checkout and purchase of goods sold in Target stores.

38.   Alternative or additionally, Target forms a joint enterprise with its customers (the "Target-Consumer Joint Enterprise"). Target and consumers (who have installed the Target App, are Target Circle members, and shop in Target stores) have an agreement, express or implied, that Target will sell and consumers will purchase goods in Target's stores. Target and these consumers have a common purpose to provide consumers with goods for purchase. Target and these consumers have a community of pecuniary interest for that purpose, in that Target profits from the sale of goods, and consumers purchase Target's goods at reasonable prices, including via Target

Circle Offers which provide discounts and promotions that encourage consumers to shop at Target. Target and these consumers have an equal right to a voice in the direction of the enterprise which gives an equal right of control. Both Target and consumers must continue to participate (Target by offering goods, and consumers by shopping for and purchasing goods) in order for the joint enterprise to continue. Target considers the input its consumers in determining its store location, layout, inventory, and sales and promotions practices, in order to provide desirable goods at prices at which consumers are willing to purchase. Consumers provide feedback and input to Target, including via the manner in which consumers shop and purchase from Target.

39.   Once a consumer has installed the Target App (which includes associated software) and activates Bluetooth on their device, the consumer's device interacts with the Target Bluetooth beacons without further action by the consumer.

40.   The Target Bluetooth beacons that are installed in the light fixtures in Target's stores transmit beacon identifiers via Bluetooth protocol and interact with devices (for example, consumer's iPhones) on which the Target App is installed in an infringing manner.

41.   Target also maintains, owns, operates or controls one or more servers that Target configures to interact with devices on which the Target App is installed (the "Target Server(s)"). Alternatively, on information and belief, Target is responsible for the operation and actions of the Target Server(s) because Target directs or controls their operation (for example, by employing an agent to configure and operate the Target Server(s) on Target's behalf). Alternatively, or additionally, Target forms a joint enterprise with an entity that operates the Target servers, including, but not limited to, an entity associated with Acuity Brands (further information regarding such a joint enterprise alternative is provided at the end of this section in Paragraphs 132-134) (the "Server Joint Enterprise"). For example, software designed and distributed by Target causes

devices on which the Target App has been installed to communicate with Server(s) operated by Acuity Brands (or its agent) on behalf of Target, and Target is responsible for the operation and actions of these servers. "Target Server(s)" include these server(s) that are operated by Acuity Brands or its agent on behalf of Target.

42.   Software (including libraries) associated with the Target App is triggered by receipt of beacon identifier information received from Target Bluetooth beacons to cause the device on which the Target App is installed to communicate with the Target Server(s). As a result of receiving signals from Target Bluetooth beacons, devices on which the Target App is installed communicate with Target Server(s)., e.g., servers operated by Acuity Brands on behalf of Target. In response, Target Server(s) provide information to the devices on which the Target App is installed.

43.   As a result of the interaction (in accordance with Target's design and implementation) among the Target Bluetooth beacons, Target Server(s), and the consumer's device on which the Target App is installed, Target Servers and also the consumer's device are provided with a real-time in-store location of the consumer's device. For example, at least when a consumer brings their device (e.g., iPhone) with Bluetooth services enabled and the Target App installed into a Target store, the consumer's device provides Target Beacon identifier information to Target Server(s) and, as a result, the consumer's device is provided with information related to the Target store, including location information and, on information and belief, a listing of beacon identifiers for the Target Bluetooth beacons for that Target store.

44.   To the extent Target's Server(s) are, alternatively, operated through a joint enterprise, on information and belief, Target forms a joint enterprise with the entity that operates the Target Server(s) because Target and the entity (e.g., Acuity Brands or a related entity and/or

other Bluetooth beacon/server providers) have an agreement, express or implied, regarding the purchase, installation, configuration, and operation of a system including Target Bluetooth beacons (e.g., provided by Acuity Brands to Target) and devices on which the Target App and related software (e.g., libraries) is installed and configured to cause the devices to communicate with the Target Bluetooth beacons and Target Server(s) in order to provide information and services to Target's consumers. Further, Target and the entity share a common purpose of operating this system and its components in order to, among other things: provide consumers with information related to Target and Target stores; gather information regarding consumer shopping patterns; and increase the sales and profits of Target and its vendor(s) and partners.

45.   Further, on information and belief, Target and Acuity Brands and/or other Bluetooth beacon/server providers share a community of pecuniary interests in their common purposes in that, for example, the greater the utility of the system to Target and consumers, the greater the sales and profit to both Target and the entity that operates Target Server(s), including through increased server activity and business.

46.   Further, on information and belief, Target and Acuity Brands and/or other Bluetooth beacon/server providers have an equal right to a voice in the direction of the enterprise and an equal right of control. For example, the Target Bluetooth beacons (installed in Target stores and controlled and configured by Target), the Target App (and associated software such as libraries) and Target Server(s) are all necessary for the operation of a system that provides benefits to Target and consumers, such as by providing location-based information via the Target App. While Target configures the Target Bluetooth beacons and the Target App to communicate with the Target Server(s), the entity that operates the Target Server(s) configures them to accept messages from devices on which the Target App is installed. As each version of software (e.g.,

Target App versions such as android app version 6.52.1 that is listed as updated on Sept. 6, 2019) is developed and released, Target and the entity cooperate to ensure that the Target Server(s) continue to work with the Target Bluetooth beacons and devices on which the Target App is installed. Further, either Target or the entity operating the Target Server(s) may cause, if they wish, the Target Server(s) to not receive or send messages to the devices on which the Target App is installed.

47. Bluetooth devices, such as Mobile devices on which the Target App is installed and Target Bluetooth beacons, connect by scanning successive advertising and/or data channels. In particular, Bluetooth devices scan successive different advertising channels in successive scan windows. See Bluetooth Specification Version 5.0, Vol. 6, Section 4.4.3.

48. To save power and extend battery life, Bluetooth beacons and mobile devices enter a sleep mode between successive scans, switching back to an active mode to conduct each scan. See, e.g., Bluetooth Specification Version 5.0, Vol. 3, Section 8.6.9.1; Vol. 1, Section 2.2.5.1.

49. Bluetooth beacons and mobile devices conduct successive scans at scheduled connection events, necessitating use of a timer set to notify the beacons or devices of the occurrence of these events. See Bluetooth Specification Version 5.0, Vol. 6, Section 4.4.3.

COUNT I

(Target's Infringement of U.S. Patent No. 10,455,533)

50. Paragraphs 1-49 are reincorporated by reference as if fully set forth herein.

51. On information and belief, Target utilizes beacon systems in its retail stores that contributorily infringe, and induce infringement of, claims of the '533 patent. Based on industry reports, Target deployed beacon systems in Target retail stores that provide options to in-store shoppers and provide shopping suggestions based on the individual user's personal interests. See

for example the information at: https://blog.beaconstac.com/2016/02/25-retailers-nailing-it-with-their-proximity-marketing-campaigns/   ;

https://www.nytimes.com/interactive/2019/06/14/opinion/bluetooth-wireless-tracking-privacy.html.

52.   On information and belief, Target-utilized beacon technology used or uses a location of a customer in the store to direct information to that user. See for example the information   at: https://blog.hubspot.com/marketing/beacon-technology;

https://techcrunch.com/2017/09/20/target-rolls-out-bluetooth-beacon-technology-in-stores-to-power-new-indoor-maps-in-its-app/;

https://www.nytimes.com/interactive/2019/06/14/opinion/bluetooth-wireless-tracking-privacy.html.

53.   Target Bluetooth beacon(s), Target Server(s), and devices on which the Target App is installed collectively directly infringe at least claims 1, 7-9, 11, and 17-19 of the '533 Patent, literally and/or under the doctrine of equivalents. As a non-limiting example, Target Bluetooth beacon(s), Target Server(s), and devices on which the Target App is installed collectively directly infringe claim 1 because all hardware and/or software systems of system claim 1 are owned or controlled by, performed by, or attributable to Target.

54.   Target has had knowledge of the infringing nature of its activities, or at least a willful blindness regarding the infringing nature of its activities, with respect to the '533 Patent at least as of the date of the complaint.

55.   Target has therefore infringed and is liable to Proxense for contributorily infringing, or inducing infringement of, one or more claims of the '533 Patent pursuant to 35 U.S.C. § 271(a).

56.   As a result of Target's infringement of the '533 Patent, Proxense has suffered monetary damages, and seeks recovery in an amount adequate to compensate Proxense for Target's infringement, but in no event less than a reasonable royalty for the use made of the invention by Target together with interest and costs as fixed by the Court.

PRAYER FOR RELIEF

Plaintiffs request that the Court enter judgment against Target as follows:

(A)   finding that Target has infringed one or more claims of each of the above patents-in-suit, directly and/or indirectly, literally and/or under the doctrine of equivalents;

(B)   awarding damages sufficient to compensate Plaintiffs for Target's infringement under 35 U.S.C. § 284 including an accounting of all infringement and/or damages not presented at trial;

(C)   finding this case exceptional under 35 U.S.C. § 285 and awarding Plaintiffs their reasonable attorneys' fees;

(D)   awarding Plaintiffs their costs and expenses incurred in this action;

(E)   awarding Plaintiffs prejudgment and post-judgment interest; and

(F)   granting Plaintiffs such further relief as the Court deems just and appropriate.

DEMAND FOR JURY TRIAL

Plaintiffs demand trial by jury of all claims so triable under Federal Rule of Civil Procedure 38.

Date: September 28, 2020.   Respectfully submitted,

                                                  /s/ Robert Christopher Bunt
                                                  Robert Christopher Bunt
                                                  State Bar No. 00787165
                                                  Charles Ainsworth
                                                  State Bar No. 00783521
                                                  PARKER, BUNT & AINSWORTH, P.C.
                                                  100 E. Ferguson, Suite 418
                                                  Tyler, TX 75702
                                                  903/531-3535
                                                  E-mail: rcbunt@pbatyler.com
                                                  E-mail: charley@pbatyler.com

                                                  RICHARD T. MCCAULLEY, JR.
                                                  HALEY GUILIANO LLP
                                                  111 North Market Street
                                                  Suite 900
                                                  San Jose, CA 95113
                                                  (669) 213-1071
                                                  richard.mccaulley@hglaw.com

                                                  COUNSEL for PLAINTIFF